progressive diminution in size on the following days. On the 17th day, the whole mass had dwindled to the size of a small pea. The cure was complete.

The author, who had before successfully practised this method, closes his essay with the following corollaries: 1st, the efficacy of vinous injection in erectile tumours is indubitable; it is suprising in some instances; 2d, this efficacy is not limited exclusively to superficial or cutaneous erectile tumours, it applies equally well to the deep seated. It is applicable not only to erectile tumours of the face, but also to those seated in other parts of the body. 3d, there are cases of this latter kind which it is useless to attempt to cure excepting by the injections in question. 4th, the injection is more efficacious, if it is made with wine in which aromatic herbs, as lavender, rosemary, etc., have been boiled.—*Annales de Therapéutiques*, Oct., 1844, from *Gior. Della Sci. Med. di Torino*, Aug., 1844.

36. *Hereditary brittleness of the Bones.* By Dr. Pauli.—Many instances are recorded in which individuals have been affected with a sort of constitutional brittleness of the bones, and in whom fractures have happened with an unfortunate degree of facility. But we are not aware that this disposition has been observed in several members of the same family, so as to be in a manner hereditary. This has induced us to republish entirely the following article, extracted from a work of Dr. Pauli, of Landau.

"In the commune of Offenbach there resides a family, all the members of which have already had fractures. Three of them have each had two fractures; another three, either of the arm or of the leg; one has even had so many as five fractures of one or the other extremity: and to produce these injuries no considerable violence was in general requisite. The father and grandfather before them had fractures of the limbs. This family, moreover, is a very healthy one; there does not appear to be any scrofulous or other taint in operation. It is remarkable that not one of them suffered a fracture before the age of 8, so that one might suppose that this particular fragility of the osseous matter was developed only towards the age of puberty. It would seem, however, that the condition of this fragility consists in some change of the chemical constituents of the bones in their relations to each other.

"It has been very frequently observed that men addicted to the use of brandy often experience fractures, (in consequence of a degree of brittleness induced in the bones), which require a long course of treatment to insure their consolidation. I met with this great fragility of the bones, in a subject of this kind, a man 54 years of age, who hung himself 3 years ago at Goecklengen; the ribs, particularly, snapped like glass; and a very moderate force sufficed to fracture the long bones. But if fractures in these old drunkards are cured only very slowly, precisely the contrary is the case in the family above-mentioned; for in every instance which occurs in it, the fracture is very speedily consolidated, so that generally the callus is perfectly firm at the end of three weeks. I should add, too, that when the same bone has been broken a second time, it has never occurred at the seat of the callus.—*Journ. de Chirurgie*, Jan., 1845, from *Untersuchungen und Erfahrungen aus dem Gebiete de Chirurgie.*

37. *Strength of Bones and the manner in which they resist External Violence.*—M. Chaissagnac read a memoir on this subject before the French Academy of Medicine, on the 1st of April. The following are his conclusions:—

1. The various mechanisms by which external violence fractures the bones are —*a.* Avulsion or elongation. *b.* Bending. *c.* Crushing. *d.* Torsion.

2. When external violence tends to curve a bone, the convex fibres are elongated, and those on the concave side shortened; but between those elongated and shortened fibres there are intermediate fibres which retain their natural length so long as the curvature does not exceed certain limits.

3. The long bones having almost the figure of a three-sided prism, follow the law of solidity of that solid.

4. A triangular prism, loaded on one of its angles, resists much more powerfully than when loaded on one of its surfaces.

5. The most resisting angle of the bony prisms is that on which external causes most commonly tend to produce fracture.

6. From the configuration of the bones, it is almost impossible that the direction of the fracturing force and that of the bony fibres can ever correspond.

7. The apophyses of the extremities of the long bones being almost all continuous with one of the crests of the triangular prism, form, as it were, the base of a long pyramid attached to the central stem of the bone, which adds greatly to the strength of the bone.

8. When a force is applied in a direction parallel to the length of the limb, the principle of the decomposition of forces applies to bones, not only in their contiguity, but in their continuity.

9. The characters of the anatomical neck of a bone, considered as concurring to the decomposition of the fracturing force, are five in number—*a.* They present a contraction greater than occurs in any other part of the bone. *b.* They are placed immediately below an articular surface. *c.* They constantly occupy the extremity of the bone nearest to the trunk. *d.* They are more or less obliquely incident on the body of the bone. *e.* No muscle is inserted between the neck of a bone and the articular surface it supports.

10. The diminution of thickness in the slender parts of the long bones is compensated for by the greater compactness of the bony tissue in those situations.

11. The long bones being twisted both in the direction of their axis and of their diameter, approach the spiral form, which is an additional element, enabling them to resist vertical pressure, or an elongating force, assimilating them to spiral springs.

12. At a certain period of life the solidity of bones is at its maximum, after which period it diminishes continually.

13. The fragility of the bones in old age is in no way connected, as has been supposed, with the presence of adipose matter in their structure.

14. Three causes determine the brittleness of bones in old age—*a.* Interstitial absorption of the bony tissue. *b.* The relative predominance of phosphate of lime for a certain period of time. *c.* And after that period the partial absorption of the phosphate of lime itself, which latter cause has not been hitherto pointed out.—*Dub. Med. Press*, April, 1845.

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38. *On Amputation at the Knee.* By JAMES SYME, Prof. Clin. Surg. Univ. of Edinburgh.—(*London and Edinburgh Monthly Journal of the Medical Sciences*, May, 1845.)—There are few operations in surgery, as Mr. Syme justly observes, which have excited so much discussion, or afforded room for the exercise of so much ingenuity, as amputation of the thigh. The danger immediately attending its performance, and the inconvenience of its imperfect result in rendering the stump uncomfortable, have suggested various contrivances and modifications of procedure, with the effect certainly of restraining the hemorrhage, diminishing the patient's suffering, and promoting union of the wound. But the stern evidence of hospital statistics still shows, that the average frequency of death is not less than from 50 to 70 per cent., while it cannot be denied that many of the survivors suffer from uneasiness connected with protrusion of the bone. Having from an early period of his practice devoted much attention to the subject of amputation,—having seen the circular incision give place to the flap operation,—and having witnessed the results of these methods variously modified, in the hands of many surgeons possessing every degree of operative skill, Mr. S. is at length led to the conclusion, that there is something radically wrong in the principle of the operation. This error he believes to be, dividing the thigh-bone through its shaft instead of the condyles or trochanters.

"The most frequent occasion for amputation of the thigh," says Mr. S., "is afforded by diseases of the knee-joint. Next to this may be ranked compound fractures of the leg and thigh; and then, tumours growing from the bones of the leg and thigh. Now, in regard to diseases of the knee-joint, it is well ascertained that the warrant for amputation lies in the bone, and not in the soft parts, which, however much altered through scrofulous degeneration or suppuration, readily admit of restoration to their natural condition, as is clearly shown by what happens after excision of the elbow, or amputation at the ankle-joint. In so far, therefore, as removal of the disease is concerned, it is plain that amputation through the condyles of the thigh-bone would in this case prove sufficient. As to